CLASSIFICATION CONFIDENTIAL/SECURITY INFORMATION

CENTRAL INTELLIGENCE AGENCY

INFORMATION REPORT

[redacted]

COUNTRY	Czechoslovakia	DATE DISTR.	23 Jun 1953
SUBJECT	General Svoboda--Facilities, Production, Source of Materials, Markets, Etc.	NO. OF PAGES	6
PLACE ACQUIRED	[redacted]	NO. OF ENCLS. (LISTED BELOW)	1 (Encl "A")
DATE ACQUIRED BY	[redacted]	SUPPLEMENT TO REPORT NO.	
DATE OF INFORM			

50X1

THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES, WITHIN THE MEANING OF TITLE 18, SECTIONS 793 AND 794, OF THE U.S. CODE, AS AMENDED. ITS TRANSMISSION OR REVELATION OF ITS CONTENTS TO OR RECEIPT BY AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW. THE REPRODUCTION OF THIS FORM IS PROHIBITED.

THIS IS UNEVALUATED INFORMATION

50X1

[redacted]

50X1

1. [redacted] Enclosure (A)/ This firm employed more skilled workers (total employees numbered about six thousand) than is currently customary in US firms but such is common in Czech factories. This works to the advantage of the management of the factory inasmuch as workers can be re-schooled easily to other types of work and production.

2. Between 1928 and 1930, Svoboda was equipped mostly with US metal working machines (lathes). The machine shop had approximately one thousand lathes. The enterprise was reorganized after World War II and a decision was made to manufacture only automobiles. Machines in the mechanical workshops were rebuilt and arranged in line and special machines were replaced by units which made up special sets of machines for multiple drilling, thread-cutting, milling, and other combination operations. Some of these units were bought completed (they were manufactured by Zbrojovka in Brno; Skoda in Prague; Smichov; and other enterprises). Other units were produced in the plant at Mlada Boleslav. There were 150 units in all. The machines were connected with roller-type conveyor belts for moving materials. In lines destined for mixed production, chain conveyor belts which were suspended from the ceiling were introduced for transporting material between operations.

3. The assembly section was ruined toward the end of World War II by bombs, but it was rebuilt after the war. This section was modernized to great extent. It houses the assembly-line operations for engines, transmissions, rear axles, cylinder heads, and chassis. A new hardening shop was built during and after the war. This shop has a laboratory for testing and analysis of materials; it also has tensile-strength testing apparatus and Brinell hardness apparatus. The

CLASSIFICATION CONFIDENTIAL/SECURITY INFORMATION

					DISTRIBUTION						
								ORR EV			

50X1

shop has gas furnaces and durferit furnaces; it also has furnaces and soaking pits for hardening [sic]. Some hardening was done also by the high-frequency heating method. Parts were machined in the machine shop with carbon steel tools only; this factory was most advanced in this respect. Machines in the machine shops were kept in good condition; even during the war, the lathe maintenance crews worked well. Many machines were replaced after the war by purchases abroad or by gifts from UNRA. Most of these machines were gear-cutting machines of the Fellows and Gleason types. A number of Gleason-type gear-cutting machines which were ordered were supposed to have sufficient capacity to take care of all automotive manufacturing plants in Czechoslovakia. Not all of these machines arrived, however.

4. Greatest advances in manufacturing were registered in the production of bodies. Skoda automobiles were manufactured primarily for export after the war; it was necessary to maintain the product on a world level. The greatest shortcomings were evident in a shortage of heavy body presses and in suitable production locations. A new press shop was built. It measured 47 x 120 meters and had two crane fields. Capacities of the cranes were 10 and 15 tons, respectively; in addition there was a crane with an approximate three-ton capacity. It was impossible to order large presses in Europe after the war inasmuch as Germany was unable to deliver. An order was placed for a one-thousand-ton hydraulic, two-draw HPM [sic] press and a 450-ton press made by a US firm. To make the dyes for the presses a machine was ordered from another US firm. Other machines were also in the process of being ordered but only the first-mentioned from the US arrived. Attempts were made to obtain presses from other firms with short delivery dates and from Germany as reparations. A one-thousand-ton press and an 800-ton press were obtained from the firm of Schuller. The one-thousand-ton press was mechanically operated. The 800-ton press had modern equipment. 50X1

5. When the US prohibited export of such machines to Czechoslovakia, attempts were made to obtain them from the UK and Germany--with what success [redacted] 50X1 the need for such presses at 13 to 15 considering that annual production was 17,500 automobiles; at the time, however, there were only six large presses (prior to my departure in 1949). Included in the six were a one-thousand-ton Schuller press, an 800-ton Schuller press, a 900-ton Weingarten press, a 350-ton Mach and Fisex, and a 200-ton Weingarten. Production of these large presses was planned also in Czechoslovakia and specifications for them were circulated throughout all enterprises in Czechoslovakia. Hydraulic presses such as the HPM were to be built by Skoda in Pilsen, and mechanically operated presses were to be built by Storek of Brno. There was a need for approximately 50 automobile body presses in the country.

6. A hangar destined for warehouse space was constructed in 1949 next to the press shop. There was the thought, however, that this space would be used for welding of automobile bodies.

7. In 1947, the company began production of a new type of car. This car has been on the market since the spring of 1952. This car has an increased engine capacity of 1200 cubic centimeters, lengthened chassis, and increased wheel base. The all-steel body is modern in shape. Several individual sections were reconstructed and modernized in the body shop. Pulley type chains were installed on the assembly line so that movement of products was mechanized. US-made enamels were used in the paint shop up to the time of my departure (1949) but it was assumed that synthetic type lacquers would be introduced as they were in the experimental stage. Welding of bodies was done with the aid of instruments similar to US type electric pincers and pliers. These were ordered from Belgium from the firm of Electromechanique in Brussels. The order amounted to about 15 pieces. The body shop has a frame section and sections for modern production of radiators, gasoline tanks, exhaust pipes, exhaust manifolds, etc. All in all, this is the most modern automobile factory in Czechoslovakia.

8. General Svoboda produced automobiles of the two-door type, sedans /presumably the four-door type/, Cabriolet /convertibles ?/, pickup trucks, and roadster-Cabriolet. Bodies were built at Vrchlabi but chassis were obtained from a factory in Malda Boleslav. A smaller factory in Liberec produced bodies for cross-country vehicles which were in the experimental stage. During nationalization of enterprises in Czechoslovakia, the automobile factory was amalgamated with the firms: Zahradka, Dobry, and Svoboda--Svoboda is in Kosmonosy.

9. The Dobry enterprise produced agricultural machines, particularly threshing machines which were exported mainly to Bulgaria during World War II. Dobry also had a small foundry immediately adjoining the automobile plant. It was agreed that this factory would produce mostly spare parts and the pattern and carpentry shops were transferred there. The foundry was used for casting spare parts for small dies up to five tons in weight. Zahradka was a special foundry for non-ferrous metals -- aluminum and "gray iron" /malleable iron/. Svoboda enterprise at Kosmonosy was a factory for electric motors but which produced popular agricultural tractors in later years. This production was stopped and the factory produced spare parts and cast cylinder vat sleeves.

10. General Svoboda was never a textile factory but the body plant in Vrchlabi was once a textile factory.

11. Concerning an underground factory in connection with General Svoboda, no building of this type was begun during my time there (1932 to 1949).

12. Production was planned in a plant in Mnichovske Hradiste towards the end of World War II, but actual production was never started. After the war, nothing was produced at this plant for the plant in Mlada Boleslav.

13. (I have no information on the former Zeiss Plant in Rynovice reported to be a branch factory of Skoda-Mlada Boleslav and now producing trucks and buses.)

14. The automobile plant itself had no foundry, forge, or rolling mill. The enterprise in Kosmonosy, and the Drobry and Zahradka enterprises, however, had four copular /cupola/ furnaces with a daily capacity of 40 tons of castings.

15. With regard to the machinery for the manufacture of large cog-wheels used in the production of tanks and ordered from a US firm, these machines were destined for production of automobiles. Some did not reach Czechoslovakia but with existing machines it was possible to fulfill production plans of 17,500 automobiles per year.

16. During this time, factories for presses were delivering large quantities to the USSR on a priority basis.

17. Concerning the conveyor system used, conveyor belts were of design similar to those 50X1
50X1 used in the US.

18. [redacted] I read in a newspaper that plans were being considered for moving automobile production to Poland, leaving only the firm Tatra to produce automobiles in Czechoslovakia. The factory in Mlada Boleslav was supposed to be amalgamated with the aircraft factory Avia in Letnany, Prague. This is possible inasmuch as the factory produced wings for Messerschmidts and ailerons for the Arado during World War II. The factory had a cadre of workers well acquainted with aircraft production. It would have been possible to concentrate a press shop for aircraft parts in the factory because the press shop had enough room to move two of the presses from Avia where they were located in unsuitable work space. There are also ways in which the Skoda Works in Pilsen could equip its press shop with a sufficient number of hydraulic presses suitable for aircraft production. Automobiles have export value (amounting to about 13 per cent of all foreign trade) to Belgium, the Netherlands, and Switzerland. The mechanical workshops could be well utilized for machining various parts. There is also a well-trained technical staff.

19. The machines of the factory were in better condition after World War II than they were before the war. Many machines were replaced and modernized. New machines were produced by many firms in Czechoslovakia which had large orders from the USSR. This involved mostly heavy duty lathes. Czech-made lathes had a good reputation in
50X1 USSR because the large munition factories in the USSR were built by Skoda prior to World War II and Skoda also supplied all of the machinery.

20. [redacted] the importance of Czech industrial capacity. Formerly industrial trade was carried on by foreign firms which often failed to mention the origin of a machine. During the German occupation in World War II, all industry was changed over to war production, and in many instances, Czech industry outdid German production not only in quality but also in quantity. Smaller enterprises had large-scale importance during the war and it is a pertinent fact that with Czech industry the Germans could not have conducted the war for so long. Czech industry had a surplus of engineers and otherwise trained workers with a high standard of theory and practice. At the time, it was impossible to talk of direct sabotage; but workers were extremely dissatisfied and did not work readily. There was a great amount of absenteeism -- about 12 per cent.

21. Concerning machines or techniques for increasing production, it is certain that much progress was made in "material handling" but known methods were applied.

50X1 22. [redacted] Skoda Works in Pilsen delivered no fitted groups of items or detailed machined parts to Svoboda. Svoboda, likewise, shipped no such items to Skoda Works in Pilsen.

23. Parts of sub-assemblies were not shipped from Auto-Svor, Rumburk to the factory in Mlada Boleslav during my time there.

24. Suppliers of the Mlada Boleslav plant with their products were:

Skoda in Pilsen	cast iron castings, steel castings, forgings, hot forgings
Hradec Kralove	cast iron castings
Knotek in Jicin	malleable castings
Uxa in Brno	malleable castings
Stator (Dynamo)	dynamos /generators/ and starters
Scintila in Switzerland	carburetors and electrical equipment
Bosch in Germany	carburetors and electrical equipment
SKF /sic/	ball bearings
Zbrojovka arsenal in Brno	ball bearings
Bata in Zlin	tires
Rolling mill in Liskovec (near Morovska Ostrava)	sheet metal
Rolling mill in Kraluv Dvur (near Pilsen)	sheet metal
Firms in Bratislava and Prague	paints and lacquers
Kablo in Kladno	electric cable
Mannesmann in Chomutov	steel pipe

The quality of materials was reasonable for the most part and was continually improving. This resulted primarily from transfer of many technical supervisory persons in various enterprises following the war. A shortage of alloying materials was being offset by available materials such as manganese and by other methods of work.

25. There was no new tank production in Czechoslovakia in 1949.

26. The enterprise in Vrchlabi manufactured only bodies as stated previously. Complete chassis were brought from the enterprise in Mlada Boleslav.

27. Manufacture of gear wheels on Gleason machines was a bottleneck in production. Other bottlenecks were a shortage of presses for bodies, shortage of ball bearings, and in general the poor arrival of products from various points of delivery. Producers of these semi-finished products were swamped with orders for the USSR and could not meet delivery dates for domestic enterprises.

28. There was no outstanding weapons production in 1949. The Czech army had a surplus of German, UK, and US equipment. Munitions factories were producing replacement ammunition for these weapons. In those days there was no standard equipment. The Zbrojovka arsenal in Brno produced no rifles at all and the section of the Skoda Works destined for production of cannons was working in another field.

29. Concerning planned production, a terrain automobile, similar to the Jeep, with four-wheel drive was on the drawing boards. 50X1

30. [redacted] it employed approximately 200 workers and met the requirements for storage batteries for all automobile manufacturers in Czechoslovakia.

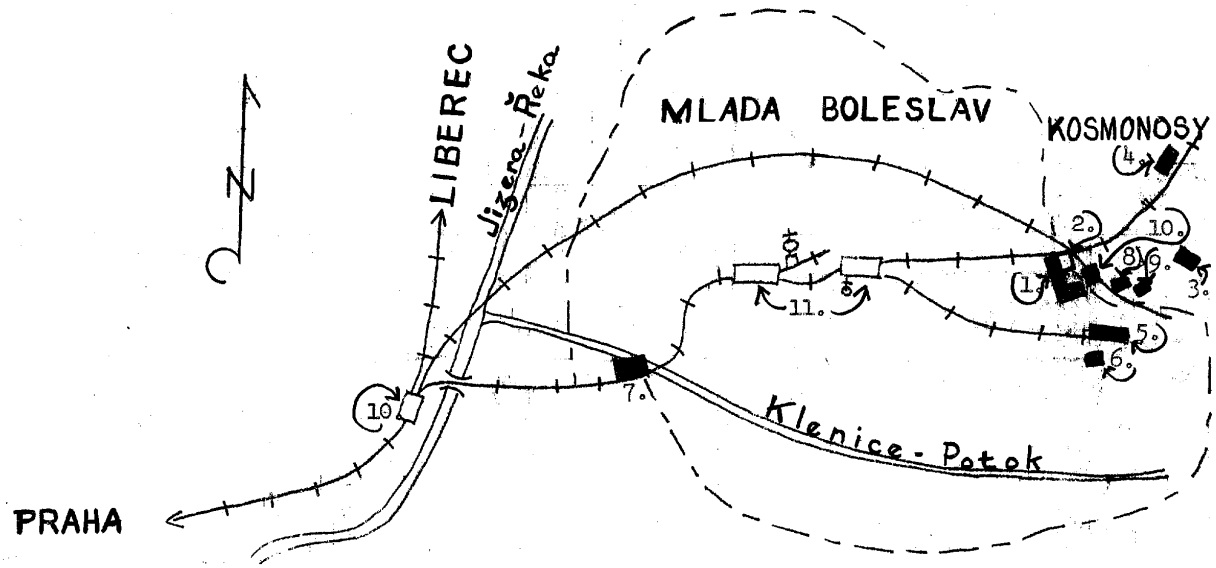
31. Concerning the power plant, Mlada Boleslav, the enterprise was not self-supporting in the delivery of electric power. It had a boiler room, operated on coal dust, with five steam turbines of three thousand kilowatt each.

- end -

Enclosure (A): Map of Mlada Boleslav showing location of General Svoboda and other industries of the area.

ENCLOSURE (A) CONFIDENTIAL/SECURITY INFORMATION

Enclosure (A): Map of Mlada Boleslav showing location of General Svoboda and other industries of the area



1. Automobile Plant of Skoda Works
2. Dobry and Company Agricultural Machines
3. Zahradka Foundry
4. Enterprises of the Firm Svoboda in Kosmonosy
5. Barracks
6. Kraj Court
7. Prague Battery Factory
8. Newly Added Assembly Shop of the Skoda Works
9. Newly Constructed Hangar Type Building
10. Railroad Station (Nadrazi)
11. Underpass (Namisti)

CONFIDENTIAL/SECURITY INFORMATION